

12398550 BOUNDARY DAM RESERVOIR NEAR METALINE FALLS, WA

LOCATION.--Lat 48°59'20", long 117°20'55", in NE 1/4 NE 1/4 sec.10, T.40 N., R.43 E., Pend Oreille County, Hydrologica Unit 17010216, at Boundary Dam 1.0 mi upstream from international boundary, 8.8 mi north of Metaline Falls and at mile 17.

DRAINAGE AREA.--25,200 mi<sup>2</sup>, approximately.

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1999 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: April 1999 to current year.

TOTAL DISSOLVED GAS: April 1999 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1999.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Temperature record rated excellent except partial days which were rated fair. Total dissolved gas record rated good except partial days which were rated fair. Partial days were April 8, 13 (Temp. only), 14, 15, 16, 18, and May 18, 19.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum recorded, 24.0°C on several days during August, 2000, but may have been higher during periods of missing record; minimum recorded, 0.5°C Feb. 5, 6, 2000, but may have been lower during periods of missing record.

TOTAL DISSOLVED GAS: Maximum recorded, 132 percent June 15, 1999; minimum 94 percent, Dec. 21-25, 1999, but may have been lower during periods of missing record.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 24.0°C on several days during August, but may have been higher during periods of missing record; minimum, 0.5°C Feb. 5, 6, but may have been lower during periods of missing record.

TOTAL DISSOLVED GAS: Maximum, 124 percent, May 3, 9, 10, 25, 26, but may have been higher during periods of missing record; minimum, 94 percent, Dec. 21-25, but may have been lower during periods of missing record.

PRESSURE, TOTAL PARTIAL, DISSOLVED GASSES, WATER, PERCENT SATURATION, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   | 99  | --- | 97  | 98  | 98  | 100 | 103 | 122 | --- | 115 | --- | 99  |
| 2   | 100 | --- | 98  | 97  | 97  | 100 | 103 | 123 | --- | 113 | --- | 99  |
| 3   | 99  | --- | 96  | 96  | 96  | 101 | 104 | 124 | 117 | 109 | --- | 98  |
| 4   | 100 | --- | 96  | 96  | 97  | 102 | 106 | 123 | 118 | 105 | --- | 98  |
| 5   | 100 | --- | 98  | 95  | 97  | 102 | 105 | 123 | 119 | 103 | --- | 98  |
| 6   | 100 | --- | 99  | 95  | 97  | 102 | 105 | 122 | 116 | 102 | --- | 98  |
| 7   | 100 | --- | 97  | 95  | 97  | 101 | 103 | 122 | 115 | 102 | --- | 98  |
| 8   | 100 | --- | 96  | 96  | 99  | 101 | 102 | 123 | 111 | 103 | 104 | 99  |
| 9   | 99  | --- | 96  | 97  | 99  | 101 | 103 | 124 | 108 | 103 | 103 | 99  |
| 10  | 98  | --- | 97  | 97  | 99  | 100 | 104 | 124 | 107 | 103 | 103 | 99  |
| 11  | 99  | --- | 96  | 98  | 100 | 101 | 104 | 120 | 105 | 103 | 102 | 97  |
| 12  | 98  | --- | 98  | 97  | 100 | 101 | 105 | 118 | 106 | 103 | 102 | 98  |
| 13  | 99  | --- | 97  | --- | 100 | 102 | --- | 117 | 107 | 104 | 101 | 97  |
| 14  | 99  | --- | 97  | --- | 100 | 103 | 107 | 118 | 112 | 104 | 101 | 98  |
| 15  | 98  | 98  | 97  | --- | 99  | 102 | 106 | 116 | 114 | 104 | 99  | 98  |
| 16  | 97  | 99  | 96  | --- | 98  | 103 | 108 | 118 | 114 | 104 | 100 | 98  |
| 17  | 97  | 99  | 96  | --- | 99  | 102 | 108 | 118 | 114 | 104 | 100 | 99  |
| 18  | 97  | 97  | 96  | --- | 98  | 102 | 109 | 116 | 119 | 103 | 100 | 100 |
| 19  | 97  | 97  | 95  | --- | 98  | 103 | 113 | 117 | 121 | 103 | 99  | 100 |
| 20  | 97  | 97  | 95  | --- | 99  | 101 | 120 | 117 | 121 | 104 | 99  | 101 |
| 21  | 97  | 97  | 94  | --- | 100 | 100 | 117 | 117 | 121 | 104 | 99  | 101 |
| 22  | 97  | 96  | 94  | 95  | 100 | 101 | 115 | 118 | 120 | --- | 99  | 99  |
| 23  | 98  | 96  | 94  | 95  | 100 | 101 | 113 | 119 | 118 | --- | 99  | 99  |
| 24  | 98  | 97  | 94  | 96  | 100 | 101 | 113 | 123 | 116 | --- | 99  | 98  |
| 25  | 98  | 98  | 95  | 96  | 100 | 101 | 115 | 124 | 115 | --- | 100 | 98  |
| 26  | 98  | 99  | 95  | 96  | 101 | 101 | 115 | 124 | 115 | --- | 99  | 98  |
| 27  | 98  | 97  | 95  | 96  | 102 | 103 | 118 | 122 | 116 | --- | 99  | 98  |
| 28  | --- | 96  | 96  | 96  | 102 | 103 | 122 | 119 | 115 | --- | 98  | 98  |
| 29  | --- | 96  | 97  | 97  | 101 | 102 | 121 | --- | 115 | --- | 99  | 100 |
| 30  | --- | 97  | 98  | 98  | --- | 102 | 121 | --- | 115 | --- | 99  | 101 |
| 31  | --- | --- | 98  | 98  | --- | 102 | --- | --- | --- | --- | 100 | --- |

## PEND OREILLE RIVER BASIN

12398550 BOUNDARY DAM RESERVOIR NEAR METALINE FALLS, WA--Continued

| DAY  | OCT  | NOV  | DEC  | JAN      | FEB | MAR  | APR      | MAY | JUN  | JUL     | AUG  | SEP  |
|--|------|------|------|----------|-----|------|----------|-----|------|---------|------|------|
| TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000 |      |      |      |          |     |      |          |     |      |         |      |      |
| DAY  | MAX  | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN  | MEAN |
| OCTOBER  |      |      |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |      |      |
| 1  | 15.0 | 14.5 | 15.0 | 9.5      | 9.5 | 9.5  | 6.5      | 6.0 | 6.5  | 2.5     | 2.5  | 2.5  |
| 2  | 14.5 | 14.5 | 14.5 | 9.5      | 9.0 | 9.5  | 6.5      | 6.0 | 6.0  | 2.5     | 2.0  | 2.0  |
| 3  | 14.5 | 14.0 | 14.5 | 9.0      | 9.0 | 9.0  | 6.0      | 6.0 | 6.0  | 2.0     | 2.0  | 2.0  |
| 4  | 14.5 | 13.5 | 14.0 | 9.0      | 8.5 | 9.0  | 6.0      | 5.5 | 6.0  | 2.5     | 2.0  | 2.0  |
| 5  | 14.0 | 13.5 | 13.5 | 8.5      | 8.0 | 8.5  | 5.5      | 5.5 | 5.5  | 2.5     | 2.0  | 2.5  |
| 6  | 13.5 | 13.0 | 13.5 | 8.5      | 8.0 | 8.0  | 5.5      | 5.0 | 5.5  | 2.0     | 2.0  | 2.0  |
| 7  | 13.5 | 13.0 | 13.5 | 8.5      | 8.0 | 8.0  | 5.0      | 5.0 | 5.0  | 2.5     | 2.0  | 2.5  |
| 8  | 13.5 | 13.5 | 13.5 | 8.0      | 8.0 | 8.0  | 5.0      | 5.0 | 5.0  | 2.5     | 2.5  | 2.5  |
| 9  | 13.5 | 13.5 | 13.5 | 8.0      | 8.0 | 8.0  | 5.0      | 5.0 | 5.0  | 2.5     | 2.0  | 2.5  |
| 10   | 13.5 | 13.0 | 13.5 | 8.5      | 8.0 | 8.0  | 5.0      | 4.5 | 5.0  | 2.5     | 2.0  | 2.5  |
| 11   | 13.0 | 13.0 | 13.0 | 8.5      | 8.5 | 8.5  | 4.5      | 4.5 | 4.5  | 2.5     | 2.0  | 2.5  |
| 12   | 13.0 | 12.5 | 13.0 | 8.5      | 8.5 | 8.5  | 4.5      | 4.5 | 4.5  | 2.5     | 2.0  | 2.0  |
| 13   | 12.5 | 12.5 | 12.5 | 8.5      | 8.5 | 8.5  | 4.5      | 4.5 | 4.5  | ---     | ---  | ---  |
| 14   | 12.5 | 12.5 | 12.5 | 9.0      | 8.5 | 8.5  | 4.5      | 4.5 | 4.5  | ---     | ---  | ---  |
| 15   | 12.5 | 12.0 | 12.5 | 9.0      | 8.5 | 9.0  | 4.5      | 4.5 | 4.5  | ---     | ---  | ---  |
| 16   | 12.0 | 12.0 | 12.0 | 9.0      | 9.0 | 9.0  | 4.5      | 4.0 | 4.5  | ---     | ---  | ---  |
| 17   | 12.0 | 11.5 | 12.0 | 9.0      | 9.0 | 9.0  | 4.5      | 4.0 | 4.5  | ---     | ---  | ---  |
| 18   | 11.5 | 11.0 | 11.5 | 9.0      | 9.0 | 9.0  | 4.5      | 4.5 | 4.5  | ---     | ---  | ---  |
| 19   | 11.0 | 11.0 | 11.0 | 9.0      | 9.0 | 9.0  | 4.5      | 4.5 | 4.5  | ---     | ---  | ---  |
| 20   | 11.0 | 11.0 | 11.0 | 9.0      | 8.5 | 8.5  | 4.5      | 4.0 | 4.5  | ---     | ---  | ---  |
| 21   | 11.0 | 11.0 | 11.0 | 8.5      | 8.5 | 8.5  | 4.0      | 4.0 | 4.0  | ---     | ---  | ---  |
| 22   | 11.0 | 11.0 | 11.0 | 8.5      | 8.0 | 8.0  | 4.0      | 4.0 | 4.0  | 1.5     | 1.0  | 1.5  |
| 23   | 11.0 | 11.0 | 11.0 | 8.0      | 7.5 | 8.0  | 4.0      | 4.0 | 4.0  | 1.0     | 1.0  | 1.0  |
| 24   | 11.0 | 11.0 | 11.0 | 7.5      | 7.5 | 7.5  | 4.0      | 4.0 | 4.0  | 1.0     | 1.0  | 1.0  |
| 25   | 11.0 | 10.5 | 10.5 | 7.5      | 7.0 | 7.0  | 4.0      | 4.0 | 4.0  | 1.5     | 1.0  | 1.0  |
| 26   | 10.5 | 10.5 | 10.5 | 7.0      | 6.5 | 6.5  | 4.0      | 4.0 | 4.0  | 1.0     | 1.0  | 1.0  |
| 27   | 10.5 | 10.5 | 10.5 | 6.5      | 6.5 | 6.5  | 4.0      | 3.5 | 4.0  | 1.0     | 1.0  | 1.0  |
| 28   | 10.5 | 10.0 | 10.0 | 6.5      | 6.5 | 6.5  | 4.0      | 3.5 | 3.5  | 1.5     | 1.0  | 1.5  |
| 29   | 10.0 | 10.0 | 10.0 | 6.5      | 6.5 | 6.5  | 3.5      | 3.5 | 3.5  | 1.5     | 1.5  | 1.5  |
| 30   | 10.0 | 9.5  | 10.0 | 6.5      | 6.5 | 6.5  | 3.5      | 3.0 | 3.0  | 1.5     | 1.5  | 1.5  |
| 31   | 9.5  | 9.5  | 9.5  | ---      | --- | ---  | 3.0      | 2.5 | 3.0  | 1.5     | 1.0  | 1.5  |
| MONTH  | 15.0 | 9.5  | 12.1 | 9.5      | 6.5 | 8.1  | 6.5      | 2.5 | 4.6  | 2.5     | 1.0  | 1.8  |
| DAY  | MAX  | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN  | MEAN |
| FEBRUARY   |      |      |      | MARCH    |     |      | APRIL    |     |      | MAY     |      |      |
| 1  | 1.5  | 1.0  | 1.5  | 3.0      | 3.0 | 3.0  | 6.5      | 6.0 | 6.5  | 10.0    | 9.5  | 10.0 |
| 2  | 1.5  | 1.5  | 1.5  | 3.5      | 3.0 | 3.5  | 6.5      | 6.5 | 6.5  | 10.0    | 9.5  | 10.0 |
| 3  | 1.5  | 1.0  | 1.5  | 3.5      | 3.5 | 3.5  | 7.0      | 6.5 | 6.5  | 10.0    | 9.5  | 10.0 |
| 4  | 1.0  | 1.0  | 1.0  | 3.5      | 3.5 | 3.5  | 7.5      | 7.0 | 7.0  | 10.5    | 10.0 | 10.0 |
| 5  | 1.0  | .5   | 1.0  | 4.0      | 3.5 | 3.5  | 7.5      | 7.0 | 7.5  | 10.5    | 10.0 | 10.0 |
| 6  | 1.0  | .5   | .5   | 4.0      | 4.0 | 4.0  | 7.5      | 7.0 | 7.0  | 10.0    | 9.5  | 9.5  |
| 7  | 1.5  | 1.0  | 1.0  | 4.5      | 4.0 | 4.0  | 8.0      | 7.0 | 7.5  | 10.0    | 9.5  | 10.0 |
| 8  | 1.5  | 1.0  | 1.5  | 4.0      | 4.0 | 4.0  | 7.5      | 7.0 | 7.5  | 10.0    | 9.5  | 9.5  |
| 9  | 1.5  | 1.5  | 1.5  | 4.0      | 4.0 | 4.0  | 8.0      | 7.0 | 7.5  | 10.0    | 9.5  | 10.0 |
| 10   | 1.5  | 1.5  | 1.5  | 4.5      | 4.0 | 4.0  | 8.5      | 7.5 | 8.0  | 10.0    | 10.0 | 10.0 |
| 11   | 2.0  | 1.5  | 1.5  | 4.5      | 4.5 | 4.5  | 8.5      | 8.0 | 8.0  | 10.0    | 10.0 | 10.0 |
| 12   | 2.0  | 1.5  | 1.5  | 4.5      | 4.5 | 4.5  | 8.0      | 8.0 | 8.0  | 10.0    | 10.0 | 10.0 |
| 13   | 2.0  | 1.5  | 2.0  | 4.5      | 4.5 | 4.5  | 8.0      | 8.0 | 8.0  | 10.0    | 10.0 | 10.0 |
| 14   | 2.0  | 2.0  | 2.0  | 4.5      | 4.5 | 4.5  | 8.5      | 8.5 | 8.5  | 10.0    | 10.0 | 10.0 |
| 15   | 2.0  | 2.0  | 2.0  | 5.0      | 4.5 | 4.5  | 8.5      | 8.0 | 8.5  | 10.5    | 10.0 | 10.0 |
| 16   | 2.0  | 1.5  | 2.0  | 4.5      | 4.5 | 4.5  | 8.0      | 8.0 | 8.0  | 11.0    | 10.0 | 10.5 |
| 17   | 2.0  | 1.5  | 1.5  | 4.5      | 4.5 | 4.5  | 8.5      | 8.0 | 8.0  | 11.0    | 10.5 | 11.0 |
| 18   | 2.0  | 2.0  | 2.0  | 4.5      | 4.5 | 4.5  | 8.0      | 7.5 | 8.0  | 12.0    | 11.0 | 11.5 |
| 19   | 2.0  | 2.0  | 2.0  | 4.5      | 4.5 | 4.5  | 8.5      | 7.5 | 8.0  | 12.5    | 12.0 | 12.5 |
| 20   | 2.0  | 2.0  | 2.0  | 4.5      | 4.5 | 4.5  | 8.5      | 8.0 | 8.5  | 13.0    | 12.5 | 13.0 |
| 21   | 2.0  | 2.0  | 2.0  | ---      | --- | ---  | 8.5      | 8.5 | 8.5  | 13.0    | 12.5 | 13.0 |
| 22   | 2.0  | 2.0  | 2.0  | ---      | --- | ---  | 9.0      | 8.5 | 8.5  | 13.0    | 12.5 | 12.5 |
| 23   | 2.0  | 2.0  | 2.0  | ---      | --- | ---  | 9.0      | 9.0 | 9.0  | 12.5    | 12.5 | 12.5 |
| 24   | 2.0  | 2.0  | 2.0  | ---      | --- | ---  | 9.0      | 9.0 | 9.0  | 13.5    | 12.5 | 13.5 |
| 25   | 2.5  | 2.0  | 2.0  | ---      | --- | ---  | 9.0      | 8.5 | 9.0  | 14.0    | 13.5 | 14.0 |
| 26   | 2.5  | 2.5  | 2.5  | ---      | --- | ---  | 8.5      | 8.0 | 8.0  | 14.0    | 13.5 | 13.5 |
| 27   | 3.0  | 2.5  | 3.0  | ---      | --- | ---  | 8.5      | 8.0 | 8.0  | 13.5    | 13.5 | 13.5 |
| 28   | 3.0  | 3.0  | 3.0  | ---      | --- | ---  | 9.0      | 8.5 | 9.0  | 13.5    | 13.0 | 13.0 |
| 29   | 3.0  | 3.0  | 3.0  | ---      | --- | ---  | 9.5      | 9.0 | 9.0  | ---     | ---  | ---  |
| 30   | ---  | ---  | ---  | 6.0      | 5.5 | 6.0  | 10.0     | 9.5 | 9.5  | ---     | ---  | ---  |
| 31   | ---  | ---  | ---  | 6.5      | 6.0 | 6.0  | ---      | --- | ---  | ---     | ---  | ---  |
| MONTH  | 3.0  | .5   | 1.8  | 6.5      | 3.0 | 4.3  | 10.0     | 6.0 | 8.0  | 14.0    | 9.5  | 11.2 |

